The Environment
Disaster, Crisis, and Conflict

Environmental Change and Security Program
Woodrow Wilson Center
November 2008
- Background
- Common Issues
- Examples of Practices
- The Future
- Recommendations
**CRISIS**

- 1996 – 2005: 2.5 billion people affected by 6,400 natural and technological disasters, a 60% increase from the previous two decades.
  
  ---United Nations

- Economic loss related to natural hazards skyrocketed from an almost $4 billion average per year in the 1950s to an average of $63 billion a year in the 1990s.
  
  ---Natural Disasters, Counting the Costs, World Bank, 2004

- Every dollar invested in effective disaster reduction saves seven dollars in terms of reduced losses from natural disasters.
  
  --The World Bank

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**ENVIRONMENT**

- Changes to ecosystems have contributed to a significant rise in the number of floods and major wildfires on all continents since the 1940s.
  
  ---Millennium Ecosystem Assessment

- The most frequent negative outcome of the World Bank’s disaster projects is a subsequent disaster lessening the project’s impact, which occurred in almost 30% of all projects.
  
  ---World Bank Independent Evaluation Group, 2006
A healthy environment enhances the capacities of societies to reduce the impact of natural and human-induced disasters.

--- *United Nations International Strategy for Disaster Reduction*
Unsustainable Baseline Conditions in Many Communities

Deforestation

Over fishing

Poor aquaculture development

Poor tourism development

Poverty

Conflict

Crisis can be an Opportunity:
Goal is NOT to Return to Pre-Disaster Conditions
ENVIRONMENTAL RISK AND VULNERABILITY:

COMMON ISSUES IN DISASTER RESPONSE
Unsustainable Resource Extraction
Unsustainable Livelihoods
Human-Wildlife Conflict
Better Practices
More Guidelines or a Checklist?
World Wildlife Fund

Humanitarian Partnerships

Launched after the 2004 Indian Ocean Tsunami with the formation of the WWF-American Red Cross Partnership
A Green Recovery Program

Livelihoods

Water & Sanitation

Shelter

Disaster Preparedness
Training and Tools

**Official Logos**

- WWF
- American Red Cross

**Training Topics**

- UV Sanitation Filter
- Home Gardening
- Solid Waste Brainstorming
- Compost Cage Preparation
Co-location of Staff
Technical Solutions
Working Together We Achieve More

Conservation Outcome
- Upstream forest & habitat protection
- Downstream water quality & marine protection
- Community education & village NRM plans
- Better managed fisheries
- Coastal forest protection
- Coastal zone management
- Model for policy engagement
- Forest & habitat protection
- Local water quality & marine protection
- Links to climate change

Beneficiary Outcome
- Long-term fresh water supply
- Reduced risk of disease
- Better livelihoods opportunities
- Long-term economic returns and food security
- Long-term livelihoods opportunities
- Better quality infrastructure
- Reduced risk of flooding
- Reduced risk of disease
- Links to climate change
Pakistan Earthquake, Philippines Oil Spill, Solomon Islands Earthquake and Tsunami, Cyclone Sidr, Bangladesh, Cyclone Jokwe, Mozambique, Sichuan Earthquake
Global Disaster Outlook

WWF Priority Places:
A Natural Disaster Risk Analysis
Natural Disasters: Combined Risk to WWF's 19 Priority Places

Based on Percentage of Priority Place Area Exposed to Hazards from Cyclones, Drought, Earthquakes, Floods, Landslides, and Volcanoes

Legend

Disaster Risk

Rank of Hazard to Priority Place from All Natural Disasters
Based on Percentage of Priority Place Area Exposed to Hazards
1. Mekong
2. Madagascar
3. Eastern Himalayas
4. Yangtze
5. Northern Great Plains
6. Mesoamerican Reef
7. Southern Chile
8. Chihuahuan Desert
9. Gulf of California
10. Coastal East Africa
11. Borneo/Sumatra
12. US Southeast Rivers and Streams
13. Amur-Heilong
14. Namib-Karoo
15. Coral Triangle
16. Amazon
17. Congo Basin
18. Bering Sea and Kamchatka

Negligible Risk:
Galapagos

“Environmental restoration is a core ingredient of disaster prevention and mitigation strategies. It also presents an unparalleled opportunity to promote cooperation among adversaries”
Test the hypothesis that, by working together, the humanitarian and conservation sectors can break vulnerable communities out of the disaster cycle.
Diminishing disasters can only be solved with a multi-sectoral approach.

- **Business organizations**
  - Market sector
  - Economic system

- **Government organizations**
  - State sector
  - Political system

- **Community-Based and Non-Profit organizations**
  - Civil society sector
  - Social system
Recommendation # 1- Start at the Beginning
Recommendation # 2- Stop focus on rush to respond
Recommendation #3 - Build integrated working relationships before an event to improve outcomes
Recommendation #4: Learning and Advocacy
Thank you

More Information:
http://www.worldwildlife.org/what/partners/humanitarian/index.html